

Caribou **Odyssey III Class,** **Autonomous Underwater Vehicle**



Caribou is the AUV Lab's newest vehicle. Recently built by Bluefin Robotics Corporation this AUV represents the culmination of significant development efforts. Featuring a modular hull design and the latest evolution of AUV navigation, propulsion and power systems, *Caribou* provides significant new autonomous survey capabilities and flexibility for other scientific needs.

Equipped with state-of-the-art sensors this AUV can collect high-quality data. *Caribou's* modular payload sections allow one core vehicle to support widely different science missions. The initial section is designed to accommodate the Edgetech[®] FS-AU side-scan sonar and sub-bottom profiler. Additional payload modules are being designed. The AUV Lab is looking forward to applying *Caribou* to a wide spectrum of research efforts including: archaeological remote sensing, multi-static acoustic modeling, fisheries resource studies and development of concurrent mapping and localization techniques.

Specifications

Length (Base):	2.6 m (103 inches)	Batteries:	Lithium Polymer
(w/ sonar payload):	3.4 m (135 inches)	Line Keeping:	+/- 2 meters
Diameter:	0.58 m (23 inches)	Altitude Keeping:	+/- 1 meter
Weight in air:	~400 kg (881 lbs)		
Buoyancy:	~+0.5 kg (+1lbs.)	Payload:	
Maximum Depth:	4500 m	Designed to accommodate various sonar,	
Operation Depth:	3000 m	camera, and oceanographic systems in modular	
Survey Speed:	3-4 knots	sections.	
Survey Endurance:	20 hours (at 3 knots)		